PORTech
Your CTI Partner

SIM Server

SS-128/ SS-256/ SS-512/
SS-1280/SS-2560

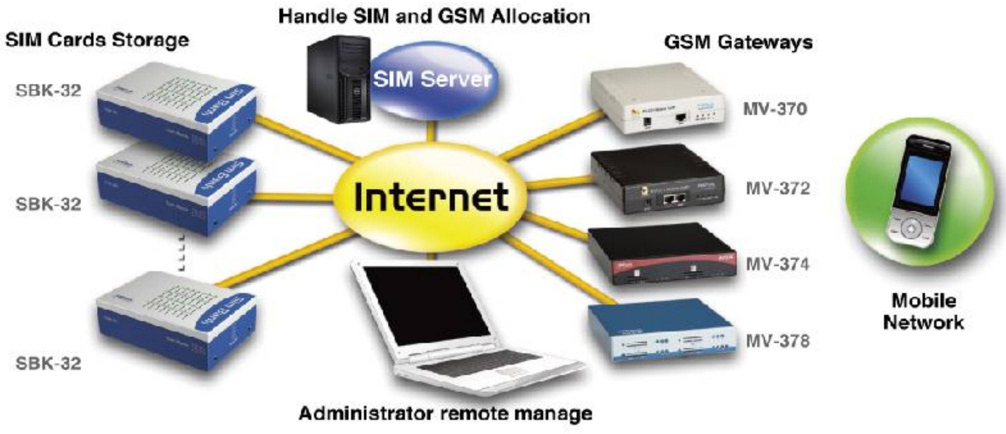
User Manual (V2.0.1)

Content

1. Introduction

SIM server is the program to handle our VoIP GSM Gateway and SBK-32: Remote SIM Bank. It offers flexible SIM card timing setting and selectable talk time, time of day based, GSM Group(Assign several SIMs Per GSM Port). Via IP connection, it can allocate any SIM cards to any Gateway of any Channel anytime you want. By using our call termination solution, you can save lots on technicians and traveling for on-site card replacement.

2. System Topology



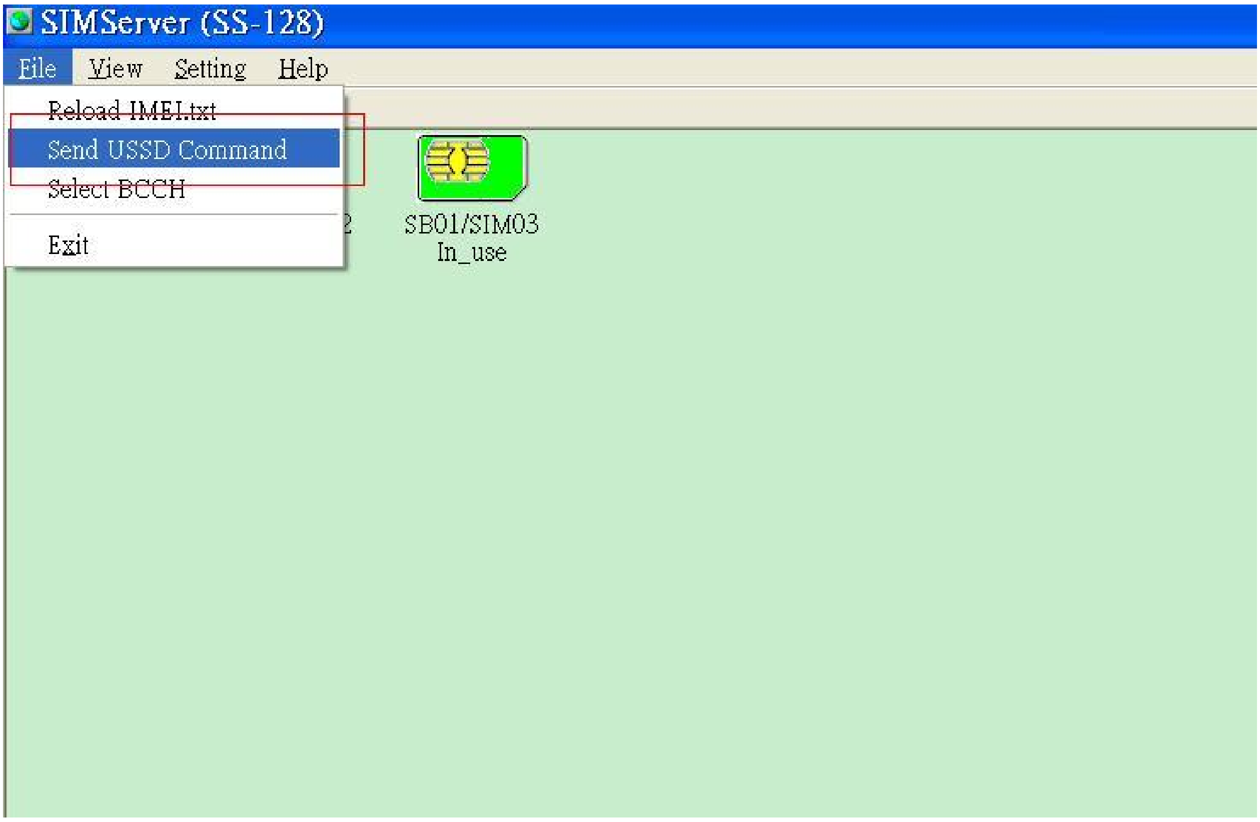
3. Functional Descriptions

- Keypro*1,install program in any PC (Support XP,WIN 7,Vista)
- Manage 4/8/16 SBK-32//SBK-128 SIM Banks, and handle 32/128 SIM cards per SBK-32/SBK-128
- Central management and secure storage of all SIM cards
- Control and Supervision of your SIMs from your office
- Allow you to choose the best GSM operators price plan
- Immediate control of all your SIM cards from your office
- Easy and powerful web based management, Easy to configure convenience any time!
- Switch SIM cards between connected gateways, configuration via remote client
- Save huge costs on technicians and traveling to the installation sites
- Save on travel expense and precious time
- Save the cost on site' technicians
- Save the down time between maintenance

4. SIM Server Setting (SS128/SS256/SS512/SS-1280/SS-2560)

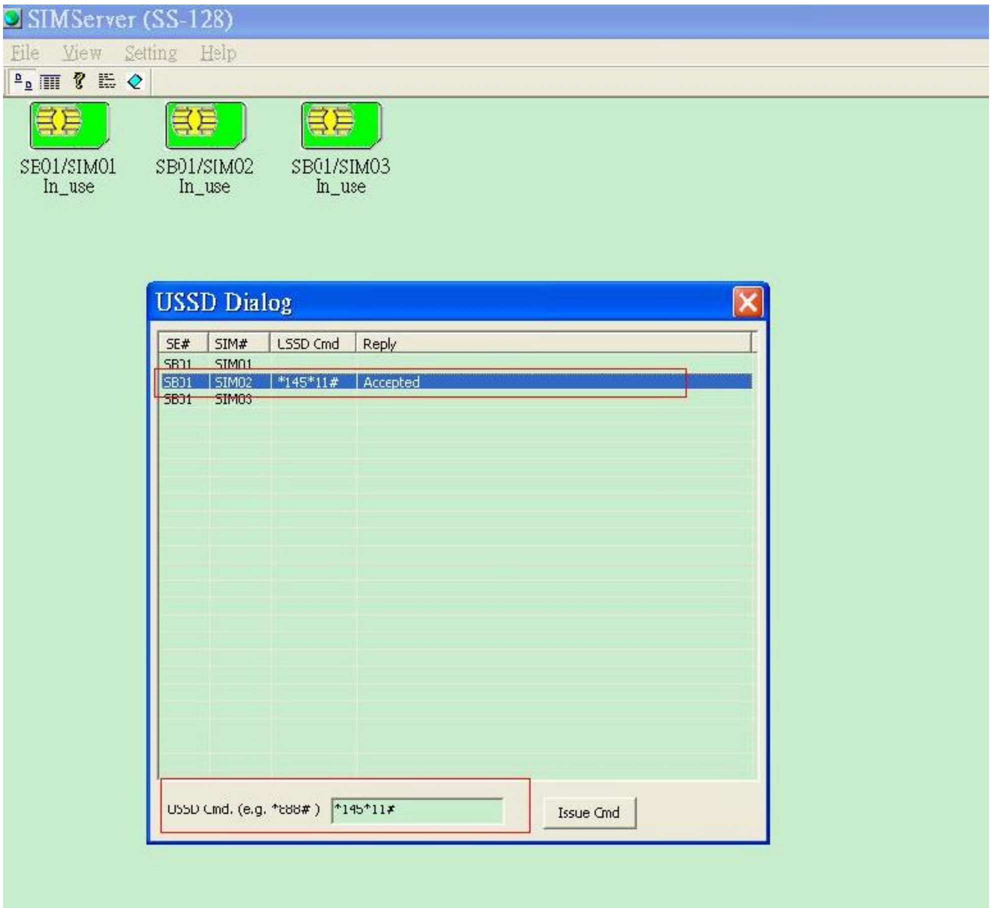
4.1 USSD (Unstructured Supplementary Service Data)

Please click File →Send USSD Command
And you can setup the USSD command on each SIM card.



- User can check the status of SBK-32/SBK-128 ID, SIM ID, USSD cmd and Reply related information on USSD Dialog

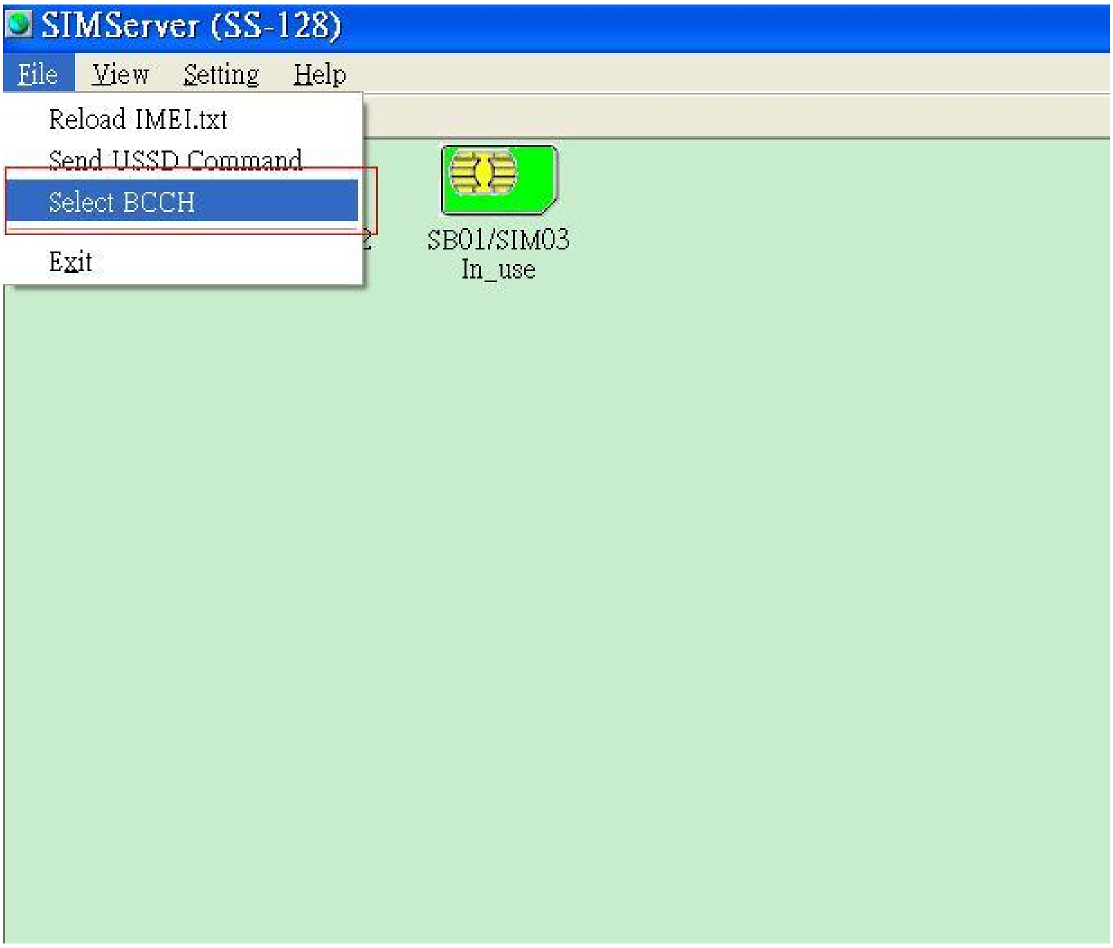
After you select the SIM ID, please enter USSD code on below "USSD Cmd" and click "Issue Cmd" to send the command. The carrier result will display on Reply status as below



4.2 BCCH selection

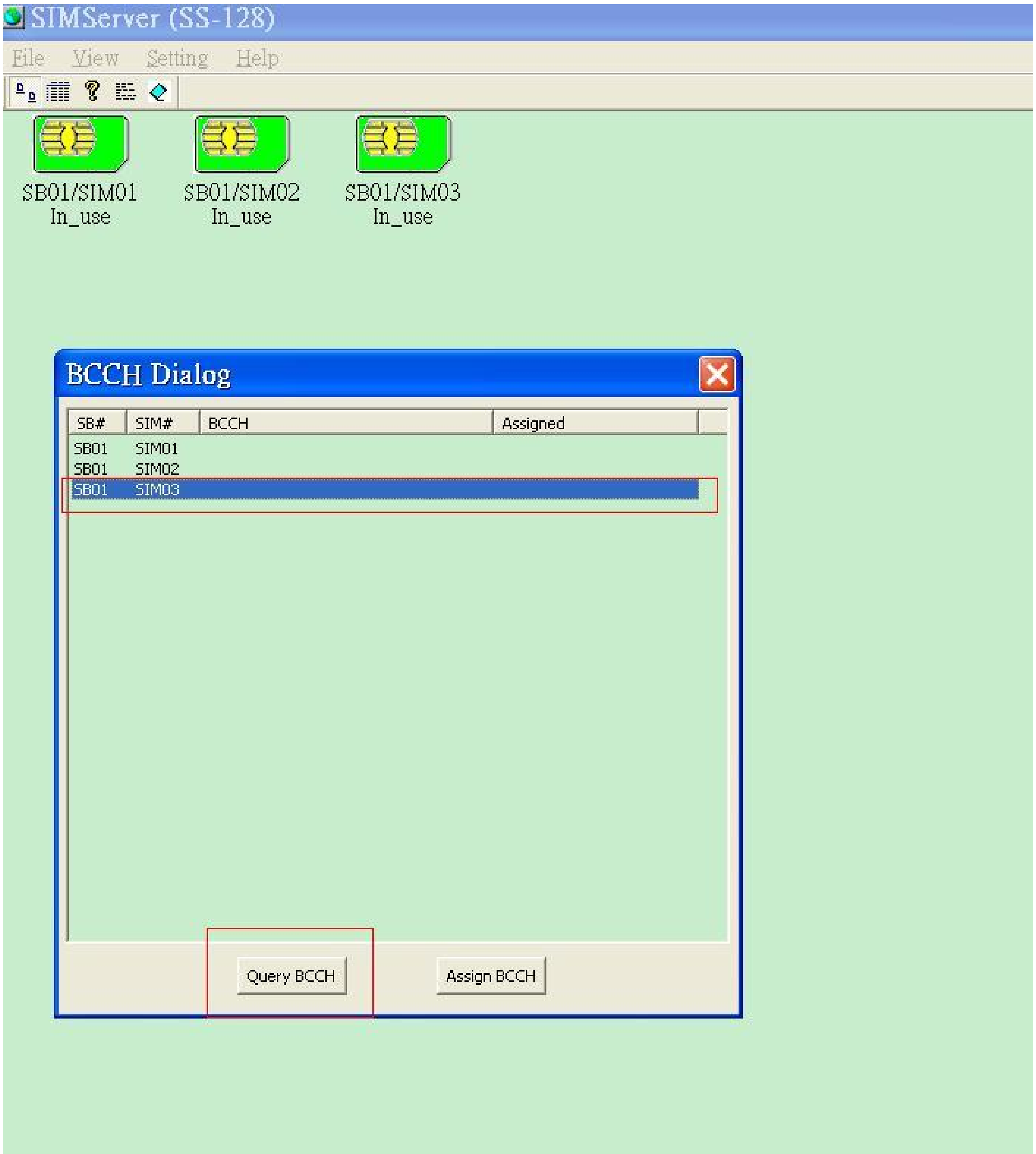
It shows BTS (BCCH) cells of the cellular network and register to new BCCH selection. Support Quad band-M10, M10E module only

Please Click File → "Select BCCH"



User can check the status of SBK-32/SBK-128 ID, SIM ID, BCCH and Assigned information on BCCH Dialog

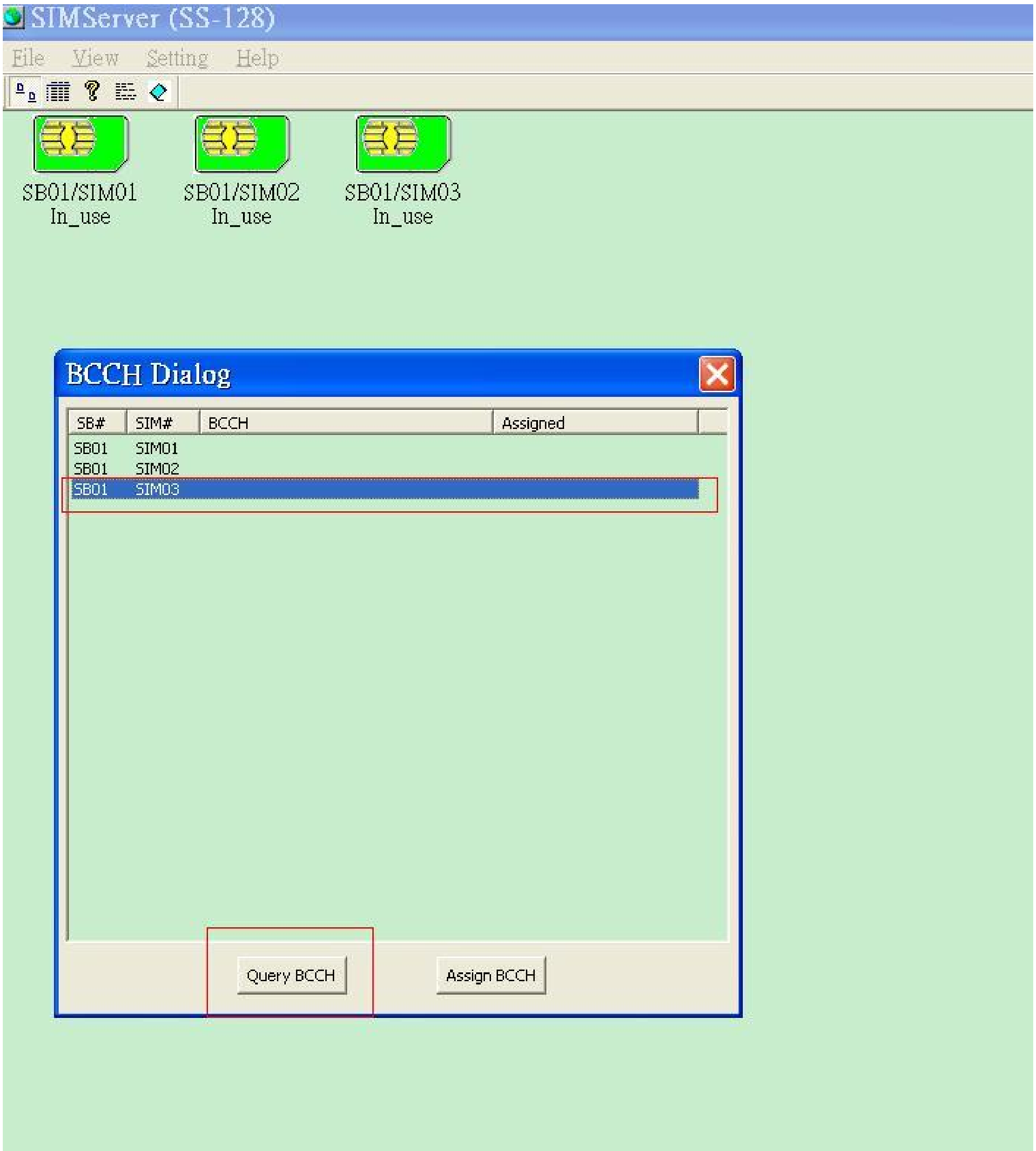
After you select the SIM ID, please enter "Query BCCH" as below



The result will display as below

Please choose a BCCH channel by clicking on the cell and click "Assign BCCH"

The System will show the BCCH code "*" on the Assigned status



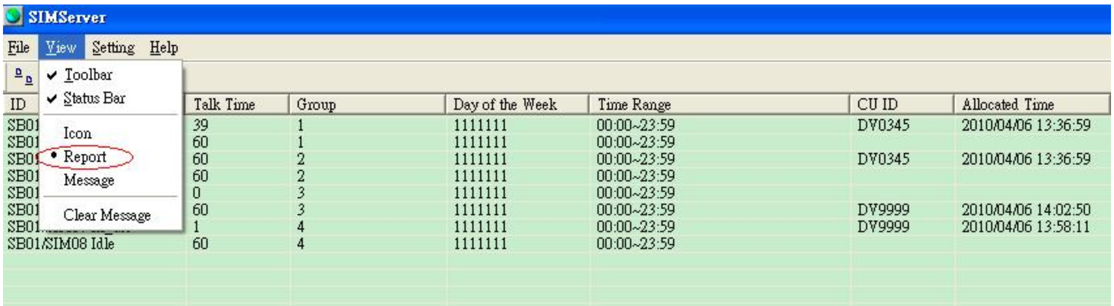
4.3 Interface View

a. SIM Icon: Define the SIM's status by Color

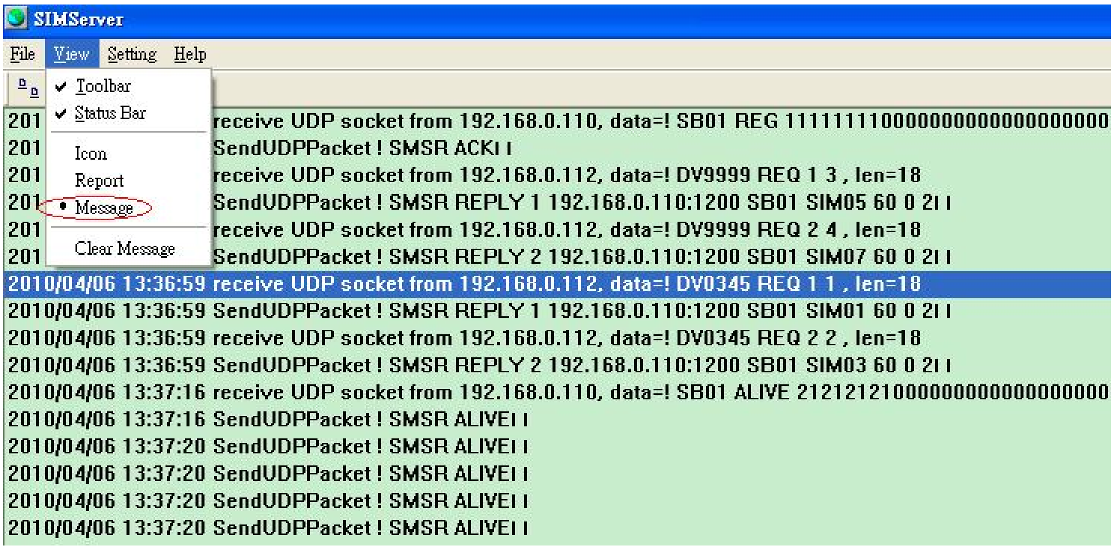


- ✓ Green, means in use: This SIM Card had been hold by SIM Server
- ✓ Blue, means Idle: This SIM card is idle, available to be used
- ✓ Red, means out of talk time: This SIM card had run out of talk time (limited by seconds and date). In this status, SIM card is not available for use. Supervisor can reset its talk time limit to change SIM card status to Idle again.

b. Report: Show complete SIM Card's status, which including talk time, Group, Date, Time range, match to which MV-Device…etc. (See the diagram below)



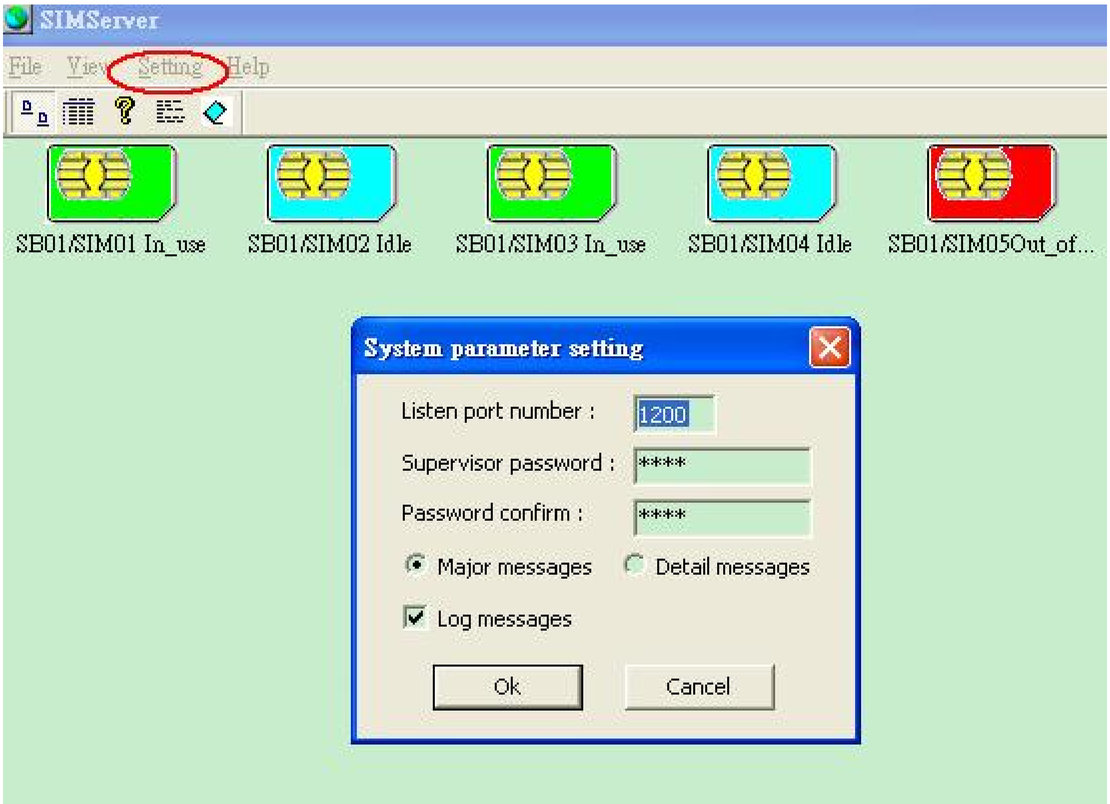
c. Message: Show system message and protocol (See the diagram below)



4.4 Setting

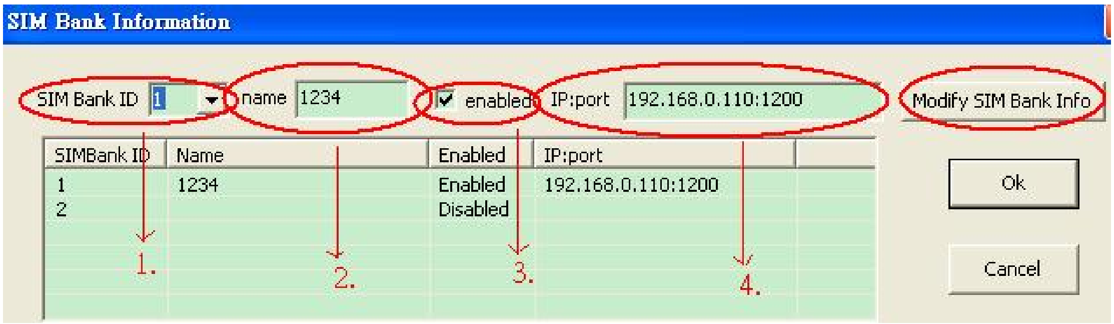
System parameter settings:

This setting page is for SIM server listen port, supervisor pass word and log record.



a. Listen port number: To manage the port number for SIM Server, the port number is changeable, default value are 1200
b. Supervisor Password: Change supervisor password
   Password Confirm: confirm the password again.
c. Major Message: Record the major log message
   Detail Message: Record the detail log message
d. Log Message: Supervisor can decide to record major log message or detail log message; system will generate a log document automatically, in this document it will record the log message in txt file.

4.5 SIM Bank Information



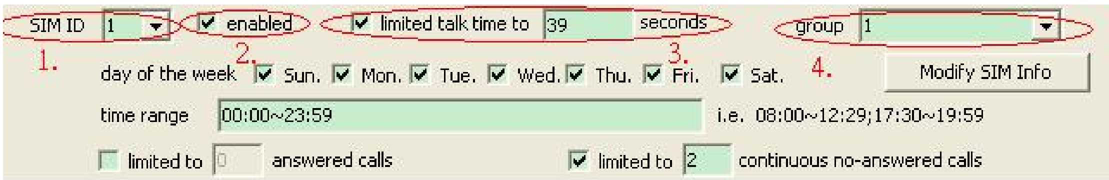
5. SIM Bank ID: Please check and fill the SIM Bank ID on your SBK-32/SBK-128 setting, which need to be matched. E.g. User set SIM Bank ID in "1", and need to fill "1" on Remote SIM Bank ,Bank Num setting

6. Name: it's the identify code between SIM Server and SIM Bank. SIM Server and SIM Bank should key the same "**name**", if so they can recognized each other. If the "**name**" between SIM Server and SIM Bank was different, the link will be rejected by SIM Server.

7. Enable or disable : To Enable or Disable SIM Bank

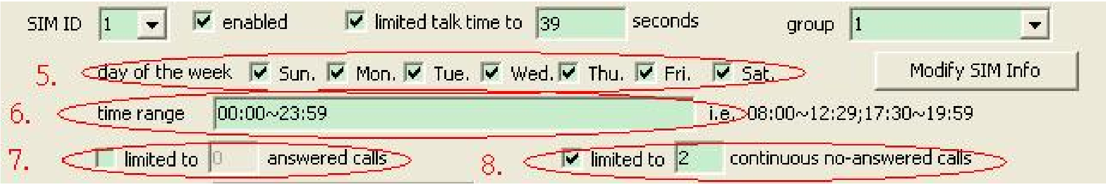
8. IP and port: Should Key the remote side's SIM Bank IP and port to match SIM Server.

To define the time limit on each SIM cards in the SIM Bank



1. SIM ID: Current SIM ID
2. Enable or Disable: To Enable or Disable this SIM card.
3. Limited Talk Time: To limit talk time on each SIM card, its means to allow how many talk time credit on the SIM card. The value is second, before you make the settings, please mark it.
4. Group: Supervisor can define the SIM card is belonging to which Group,

system will deposit the SIM card to particular GSM module according to Group Settings.



5. Day of the Week: Allow SIM card can be used by the days of a week, Mark is mean enable to use.
6. Time Range: Allow SIM card can be used by the period of a day.
   e.g. 08:00~12:29;17:30~19:59, means SIM card can only be used on the period of 08:00~12:29 and 17:30~19:59 per day. On the other time, SIM card is not permitted.
7. Limited answered calls: to limit total answered calls, means to allow this SIM card can answer how many calls (only answered calls will be count), if no marks means no limited.
8. Limited continuous no-answer calls: to limit the times of continuous no-answer calls. If the continuous no-answer calls reach the limited, system will auto route the SIM card to next one. If no marks means no limited.

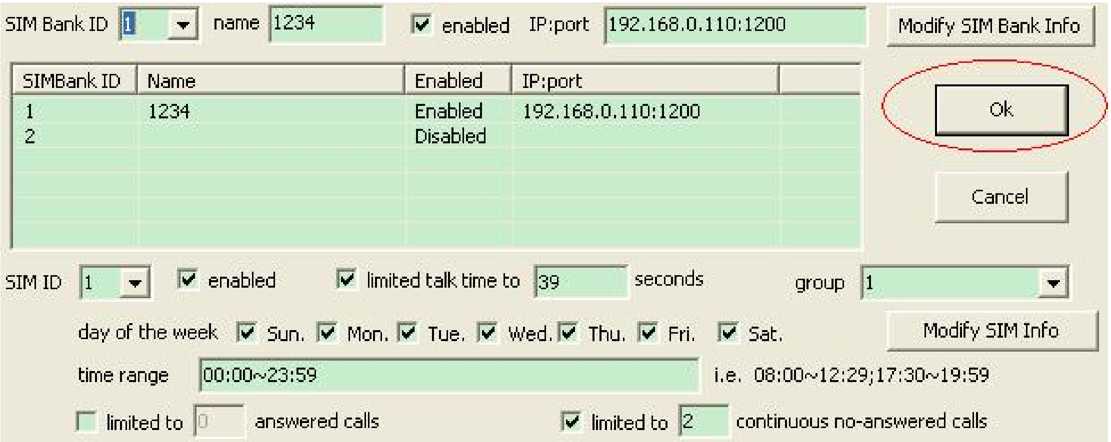
If you've done all the settings, please click "OK" which on "Modify SIM Bank Info" to motivate these settings.

SIM ID	Enabled	Talk time	Group	Day of the w...	Time range	Answer...	No ans...
1	Enabled	39	1	1111111	00:00~23:59	0	2
2	Enabled	60	1	1111111	00:00~23:59	0	2
3	Enabled	60	2	1111111	00:00~23:59	0	2
4	Enabled	60	2	1111111	00:00~23:59	0	2
5	Enabled	0	3	1111111	00:00~23:59	0	2
6	Enabled	60	3	1111111	00:00~23:59	0	2
7	Enabled	1	4	1111111	00:00~23:59	0	2
8	Enabled	60	4	1111111	00:00~23:59	0	2
9	Disabled	0	1	1111111	00:00~23:59	0	0

All the SIM cards will be switched while it reached any settings (limited).

Systems will pick another idle SIM card from the SIM Group for the correspondent GSM module.

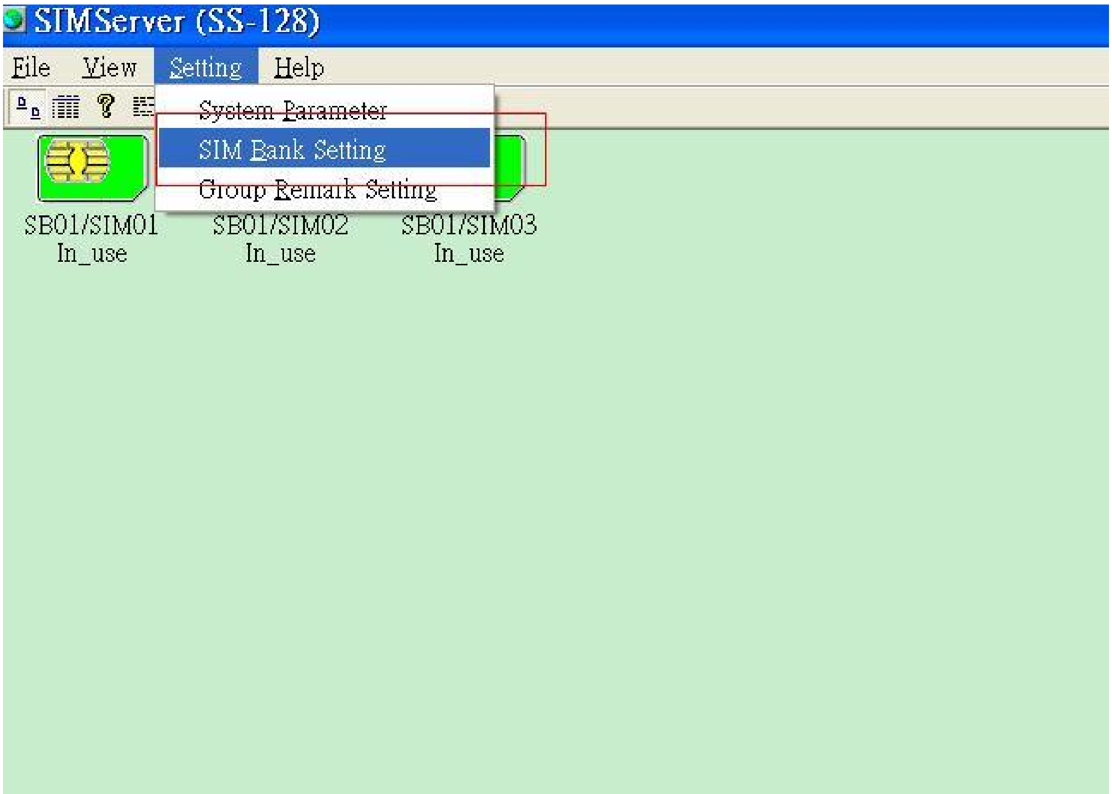
If you've done all the settings, please click "OK" which in "Modify SIM Bank Info" to motivate these settings.



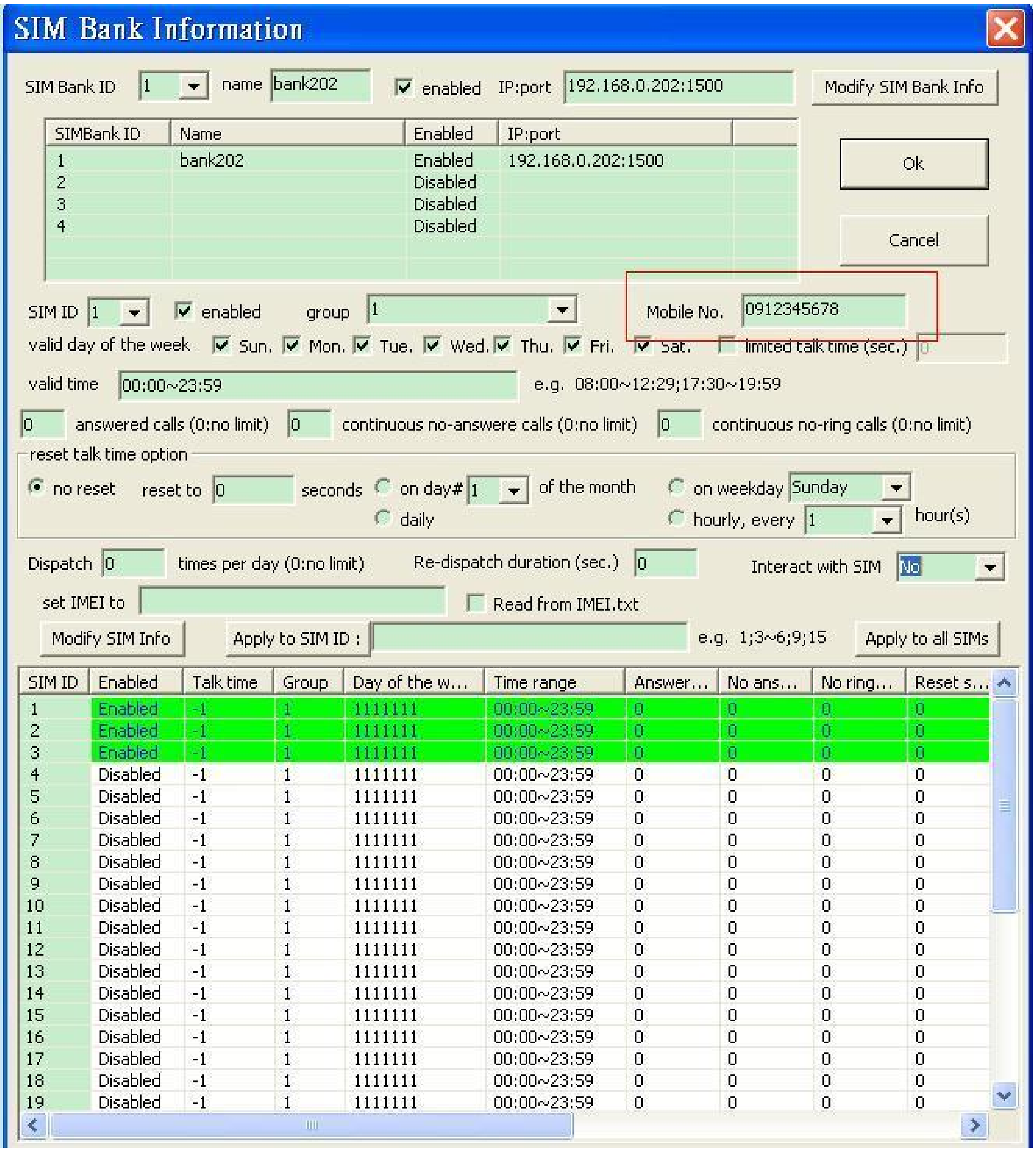
4.6 Human behavior simulation Management

4.6.1
To avoid the SIM block issue, the SIM server system can make the simulation calls traffic and send SMS automatically
User need to enter each SIM card number on the system

Please go to Setting → SIM Bank Setting

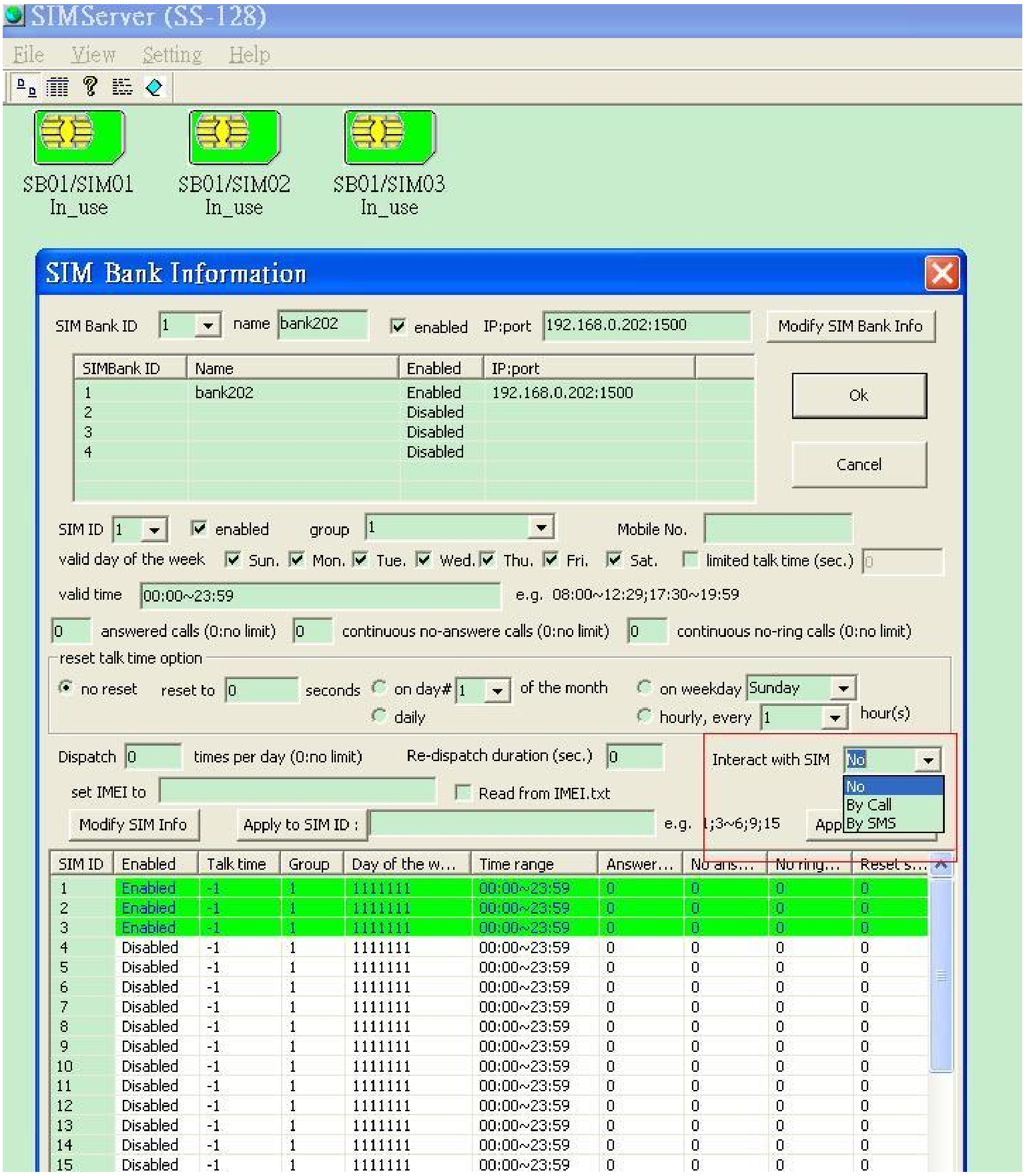


Please enter Mobile No. for each SIM card number
E.g. The mobile number on SIM ID 1 of Bank 1 is 0912345678
That you enter 0912345678 on Mobile No. of SIM ID 1



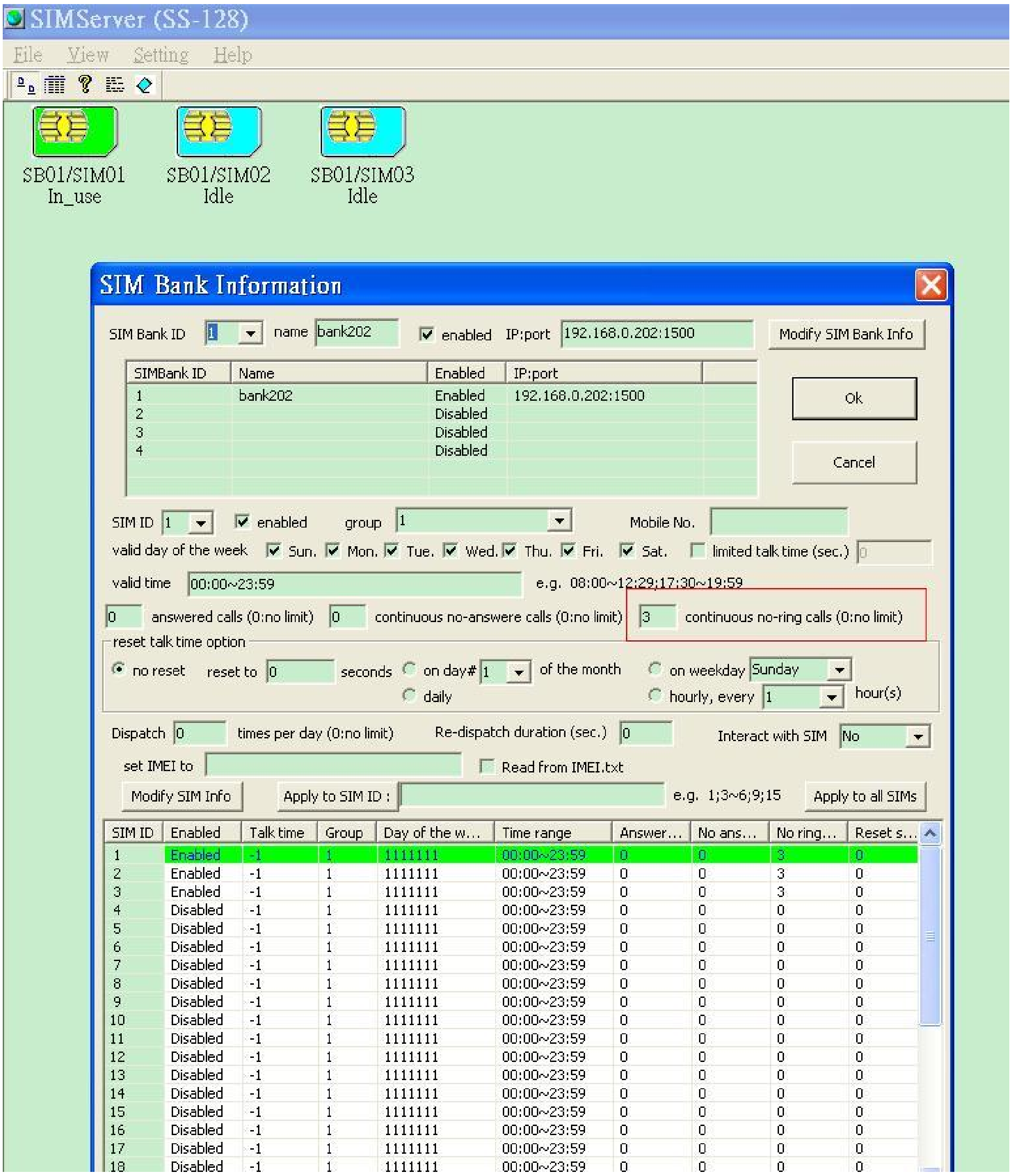
Activate the feature by selecting the Interact with SIM

If you choose “no”, the SIM card won’t process this behavior
If you choose “By Call”, the SIM card will auto make the calls to other SIM
If you choose “By SMS”, the SIM card will auto send the SMS to other SIM

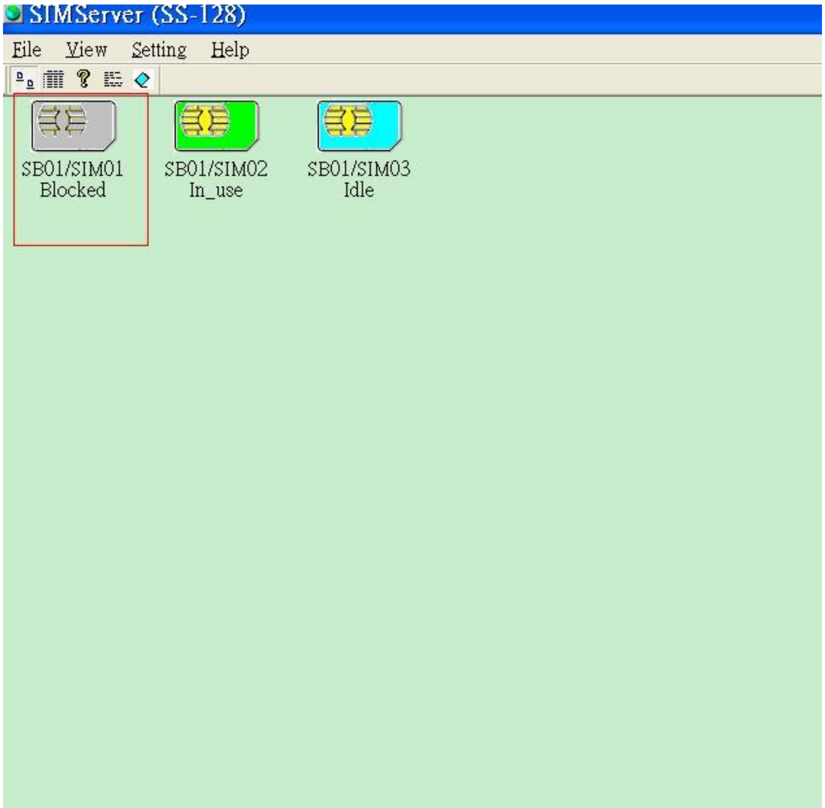


4.6.1. Continuous No-ringback calls Management (Block List)

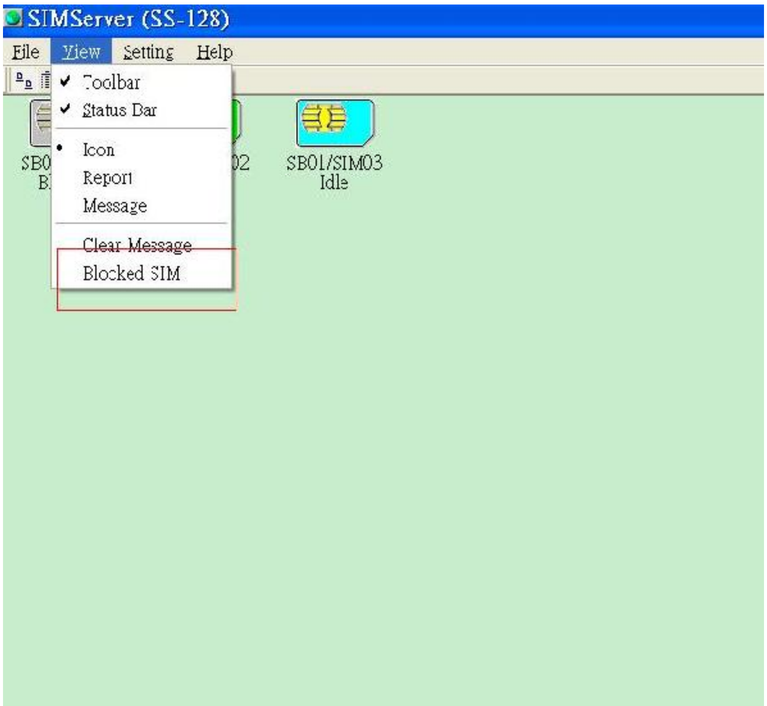
It's the feature to avoid SIM block
User can setup the unanswered ringback calls on each SIM card
The SIM Server System will put this SIMs to block list and not assign to MV gateway for incoming/outgoing calls.

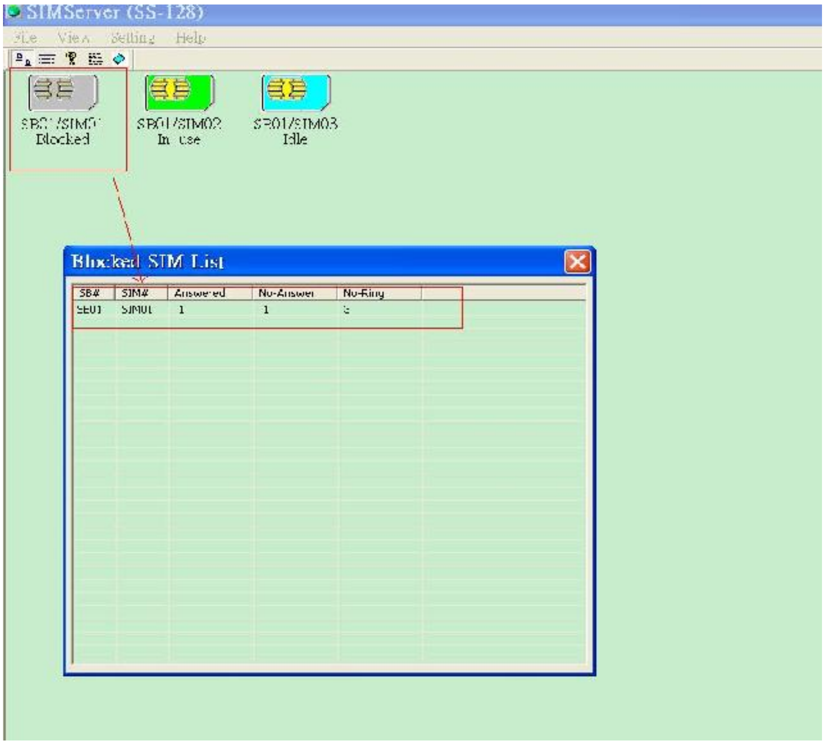


User can check the block SIM list on this page, show as below (grey color)

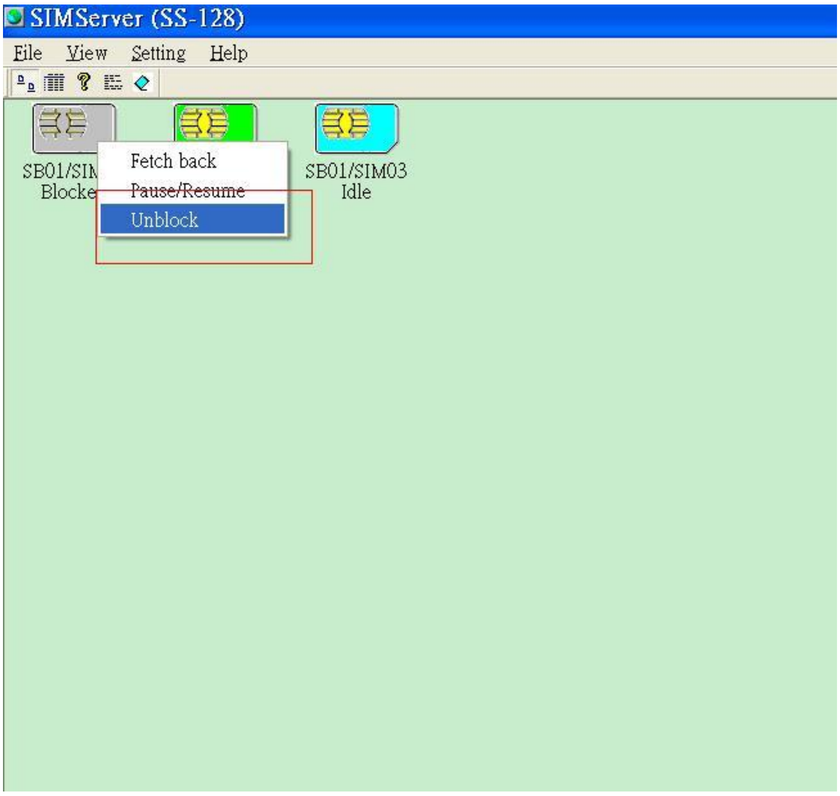


User can also check the Block SIM List show on the system below





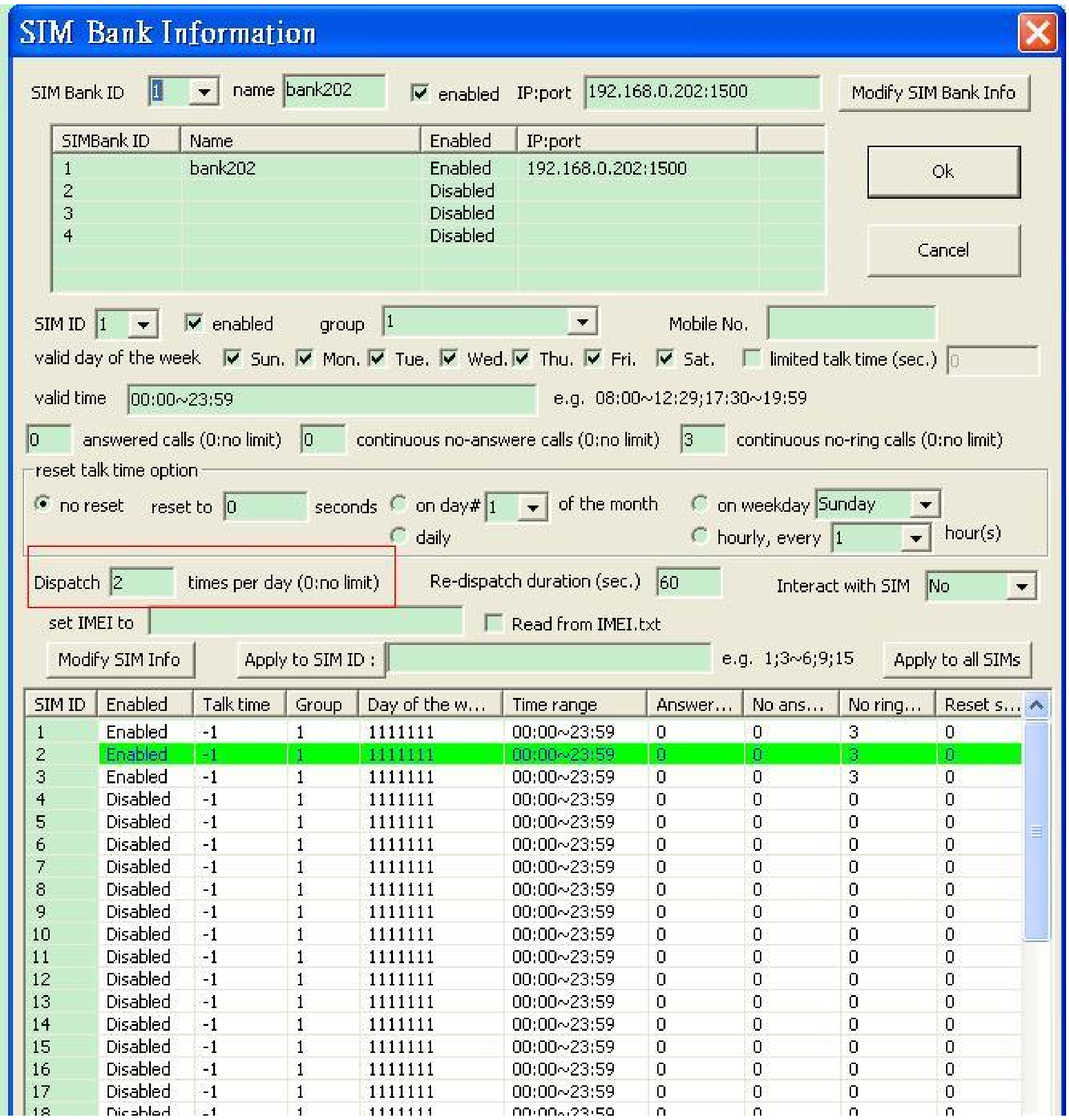
To unblock the SIM, please click the right button on the mouse and select the “Unlcok”



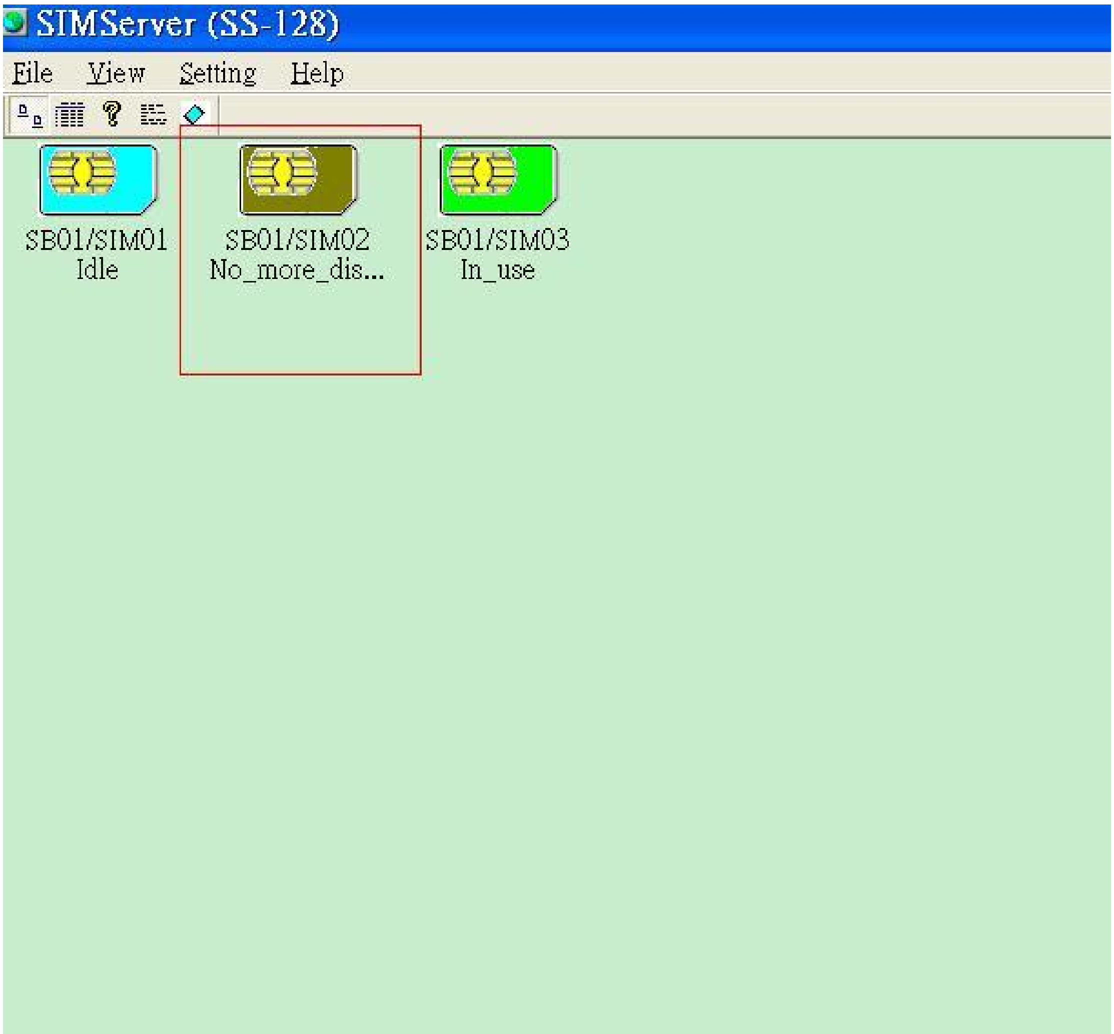
4.6.3 Dispatch SIM Card

User can assign each SIM card dispatch times per day and next dispatch time
It can avoid to use specific SIM in many times per day

✓ Dispatch time per day
Please select Setting →SIM Bank Setting
And assign the dispatch time for SIM Card



Once the SIM cards reach the dispatch times, it will show “No More Dispatch’ and stop to assign to MV gateway.
The SIM card setting will back to default after next day (after 12 pm)

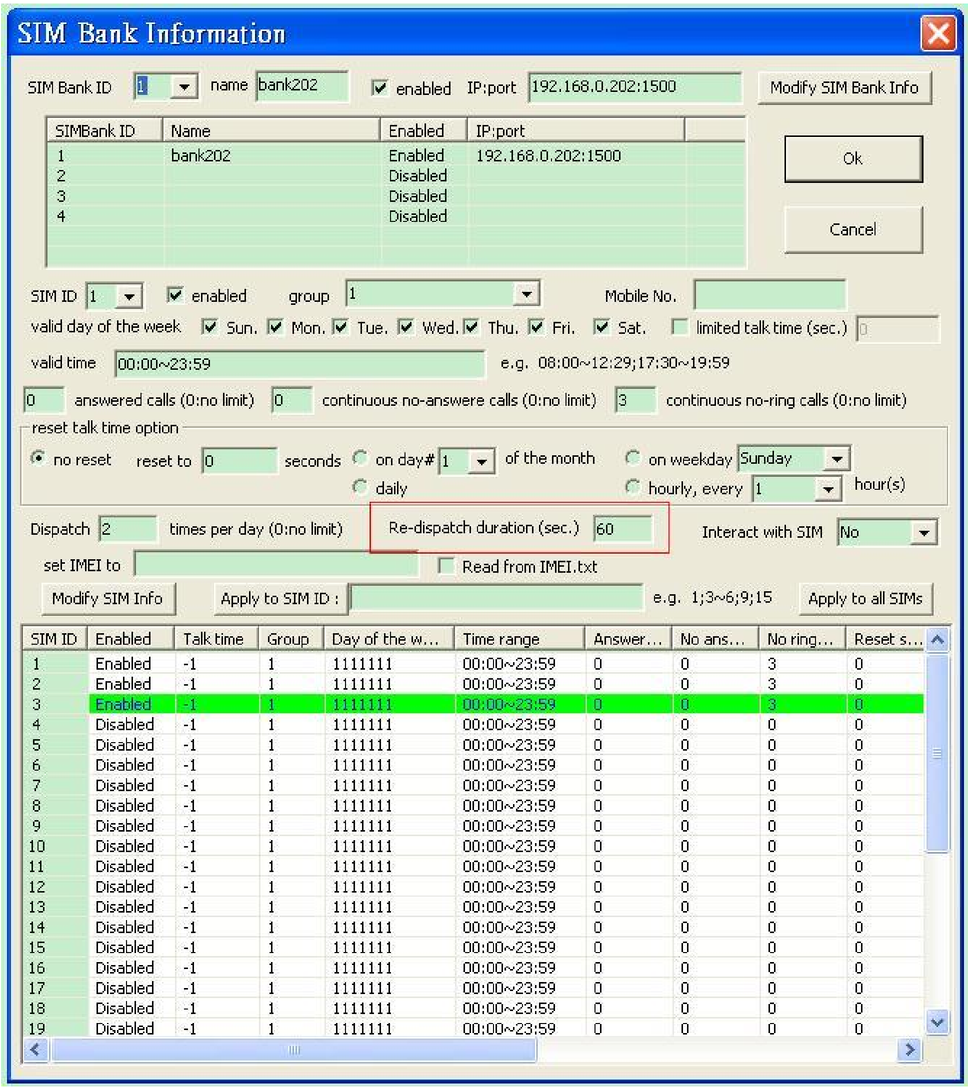


4.6.4 Re-dispatch time setting

User can setup the SIM Card duration time for next dispatch

Please select Setting →SIM Bank Setting
And enter the re-dispatch times in this blank.
E.g. If user put 60 seconds on this blank, the system won’t assign this SIM card in next 60 seconds

NOTE: User must setup the “Dispatch SIM Card” setting (the parameter can’t be “0”)

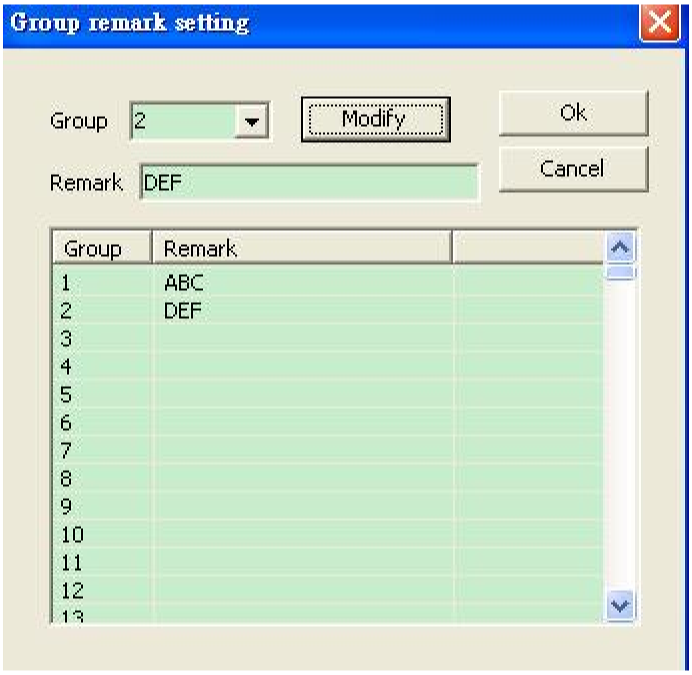


4.7 Group Remark Setting

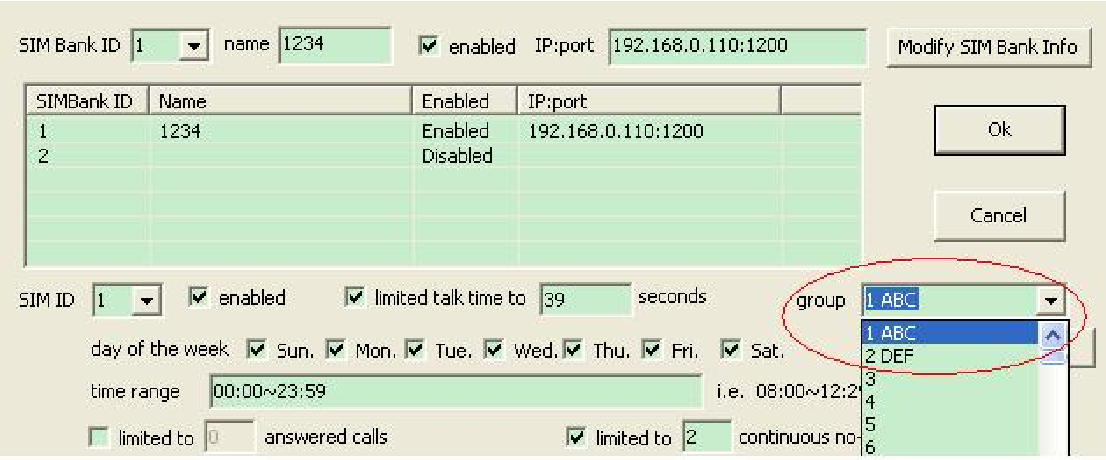
Supervisor can make a note on each SIM Groups to be much easy to distinguish each SIM Groups.

How to make a note:

a. Choose a Group
b. Key any information on “Remark Column”
c. Click Modify to apply it
d. While you done all the settings, please click OK to motivate it

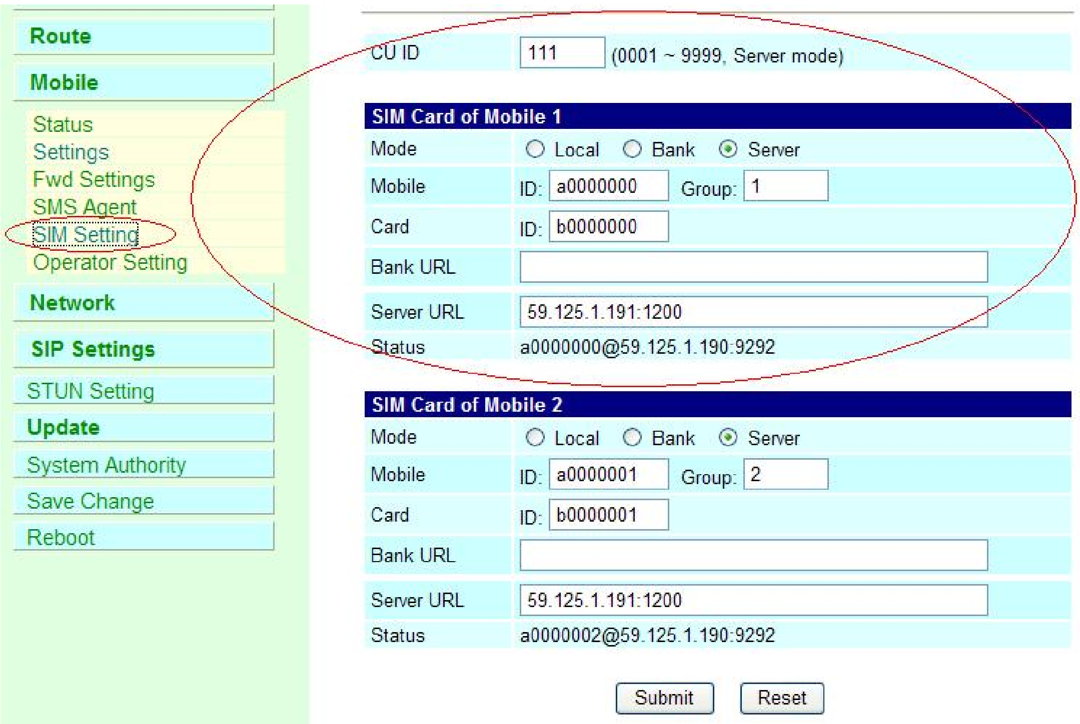


When finished the setting, you can see the NEW note within Group option. See follow diagram:



5. MV-37X Setting (VoIP GSM Gateway)

Please check SIM server setting on MV-37X as follow:
When finished the settings, please submit and click the Save Change.



1. CU ID: It's the ID for MV and SIM Server Transfer Protocol, within 1~9999. Each MV under same SIM Sever should setup different CU ID, and no reusing parameter. E.g. If you put "888" on 1st MV-378 that you can't use "888" on 2nd MV-378, and so on.

2. Mode
   a. Local: Disable Remote SIM feature
   b. Bank: Enable Remote SIM Bank feature, and manage SIM card on Remote SIM Bank.
   c. Server: Enable Remote SIM Server feature, and allocate SIM cards on Remote SIM Bank.

3. Mobile
   a. ID: Put in 8 digits (hexadecimal, also base 16), which used for GSM Module ID identification to Remote SIM protocol. User can define the ID. IF it's Server Mode, just leave it default. If it's Bank Mode, No reusing GSM Module ID for same SIM Bank.
   b. Group: Fill in SIM Group number for the Remote GSM module. Server can assign the SIM card based on SIM group number to the MV's GSM module

4. Card ID: User fills 8 digits in hexadecimal (being a number system with a base of 16). That's the GSM module ID for Remote SIM protocol.
   User can define the ID. If it's in Server Mode, Card ID can be blank or default. As for Bank Mode, Card ID must be corresponding to SIM Card ID of SIM Bank.

5. Bank URL: If it's Bank Mode, please fill SIM Bank IP and Port Number. On other hand, please leave blank for Server Mode.

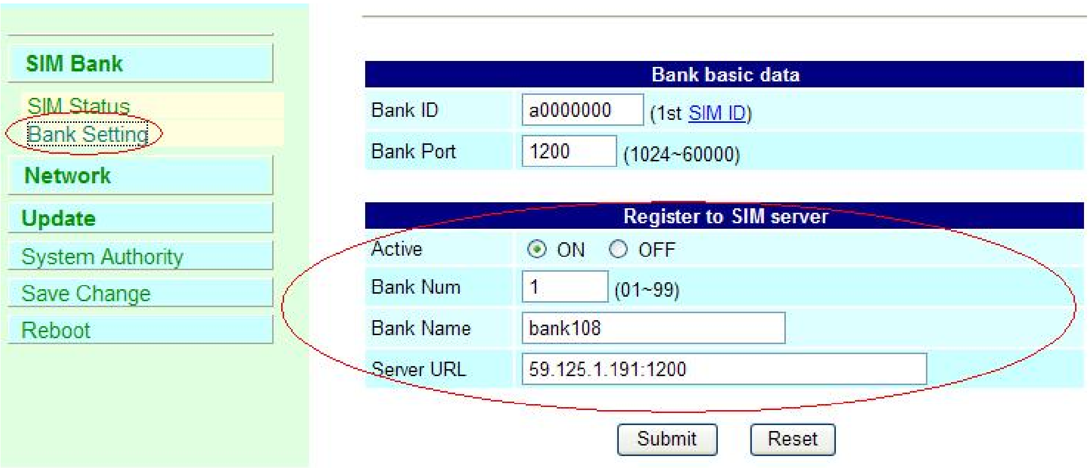
6. Server URL: If it's Server Mode, please fill SIM Bank IP and Port Number. On other hand, please leave blank for Bank Mode.

7. Status: User can check the SIM Card ID of GSM module and IP, Port

Number of SIM bank.

6. SBK-32/SBK-128 Setting (Remote SIM Bank)

Please check SIM server setting on SIM Bank as follow:
When finished the settings, please submit and click the Save Change.



Bank Setting ---->Register to SIM server
(Follows are the related setting for SIM Bank to connect SIM Server)

1. Active
   a. ON : Enable SIM Server Feature
   b. OFF: Disable SIM server feature (Default value). MV connect SIM card via remote SIM Bank instead of SIM Server.

2. Bank Num: Fill in the number (0~99) to correspond to SIM Bank ID of SIM Server. Please refer to SIM Server's setting, and default is 1.

3. Bank Name: Fill in bank name to correspond to SIM Bank Name of SIM Server. Please refer to SIM Server's setting.

4. Server URL: Fill in "SIM server IP: Listen port number" for SIM Bank connection.